

PP2380 CHROMOGENIC SALMONELLA/ CHROM SALMONELLA AGAR PLATE

FORMULA

Special Peptone	10.0	gm per Litre
Chromogenic Mix	28.0	
Agar No 1	12.0	
Cefsulodin	12.0	mg per Litre
Novobiocin	5.0	

pH = 7.2 ± 0.2



* Formulation may be adjusted and/ or supplemented to meet performance criteria

DESCRIPTION ⁽¹⁾

Salmonella Chromogenic Agar is designed to identify **Salmonella** species based on their utilisation of one chromogenic substrate. Their inability to utilise another chromogenic substrate, that most other members of the family Enterobacteriaceae can, enables rapid and reliable identification of *Salmonella* species.

Traditionally, media used to differentiate salmonellae from other members of the family **Enterobacteriaceae** depend upon the ability of **Salmonella** species to produce hydrogen sulphide coupled with their inability to ferment lactose. Salmonella Chromogenic Agar combines two different chromogens for the detection of **Salmonella** species, 5-Bromo-6-Chloro-3-Indolyl caprylate (Magenta-caprylate) and 5-Bromo-4-Chloro-3-Indolyl β -D galactopyranoside (X-gal). X-gal is a substrate for the enzyme β -D-galactosidase. Hydrolysis of the chromogen, Mag-caprylate, by lactose negative **Salmonella** species results in magenta colonies.

The medium contains bile salts to inhibit the growth of Gram-positive organisms and the addition of the Salmonella Selective Supplement is recommended to increase the selectivity of the medium. This uses novobiocin to inhibit **Proteus** spp. growth and cefsulodin to inhibit growth of pseudomonads.

Presented as a split plate, enabling two samples or subcultures to be added to the one plate.

QUALITY CONTROL

ORGANISMS: **S. Typhimurium** MVQC 0009 (ATCC™ 14028), **S. hofit** MVQC 0160 (IMVS 1799), **E. coli** MVQC 0004 (ATCC™ 25922), **P. aeruginosa** MVQC 0055 (ATCC™ 27853)

SAMPLE NUMBER: Sample size is determined in accordance with ASM Guidelines (2).

STERILITY: Those plates not used for bacteriological testing and other quality assurance procedures must be incubated at 30°C for 3 days after which they are examined for sterility.

INOCULUM: As described in TFS MBD QSP 1105, inoculate the specified test organisms onto the media using Working Culture B (≤10²cfu) or Working Culture A (≥10⁴cfu).

INCUBATION: 24 – 48 hours / 35°C / aerobically

EXPECTED RESULTS:

S. Typhimurium	4 - 5+ colonies with pink centres and a colourless edge using Working Culture B
S. hofit	4 – 5+ pink colonies using Working Culture B
E. coli	2 – 3+ pale blue colonies using Working Culture B
P. aeruginosa	<1+ inhibited using Working Culture A

ALSO CHECKED AND RECORDED

1. Batch number correct
2. Colour
3. Clarity
4. Final pH – 7.2 ± 0.2
5. Gel strength
6. Sterility
7. Correctly Labelled – CHROM SALM/ CHROM SALM

STORAGE

A shelf life of 8 weeks applies when this product is stored at 2° – 8°C in its original packaging.

Store plates away from direct sunlight and overhead lighting

REFERENCES

1. Oxoid Technical Sheet Folio 767A – Salmonella Chromogenic Medium. Oxoid Limited, Basingstoke.
2. *Guidelines for Assuring Quality of Medical Microbiological Culture Media*. 2012. Media Quality Control Special Interest Group, Australian Society for Microbiology.